# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

5. Lease Serial No.

BUREAU OF LAND MAN	BUREAU OF LAND MANAGEMENT			
APPLICATION FOR PERMIT TO	6. If Indian, Allotee or Tr	If Indian, Allotee or Tribe Name		
a. Type of work: DRILL REENT	ER		7. If Unit or CA Agreemen	t, Name and No.
lb. Type of Well: ☐ Oil Well	Single Zone  Multi	ole Zone	8. Lease Name and Well N Twelvemile Wash 1	
2. Name of Operator The Houston Exploration Company			9. API Well No. 43-047	1-38437
a. Address 1100 Louisiana, Suite 2000, Houston, TX 77002	3b. Phone No. (include area code) 713-830-6800		10. Field and Pool, or Exploratory	ratory
Location of Well (Report location clearly and in accordance with a At surface 1,899' FSL & 1,984' FWL NE 1/4	ny State requirements.*) 40 386 (o of the SW 1/4 - 109, 624		11. Sec., T. R. M. or Blk. and Sec. 13, T5S, R20E.	
At proposed prod. zone Same as above $616738770$ . Distance in miles and direction from nearest town or post office*  9.3 miles south of Vernal, UT	07064	,	12. County or Parish Uintah	13. State
Distance from proposed* 1,899' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 2,000	17. Spacin	g Unit dedicated to this well	
Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	,		BIA Bond No. on file 55044	
Elevations (Show whether DF, KDB, RT, GL, etc.) 5,268' GR	22. Approximate date work will star 01/01/2007	rt*	23. Estimated duration 30 Days	
	24. Attachments			
e following, completed in accordance with the requirements of Onsho Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	4. Bond to cover the stem 20 above). Lands, the 5. Operator certific	ne operation	s form:  ns unless covered by an existi  nrmation and/or plans as may	
William a Typen	Name (Printed Typed) William A Ryan		Date	07/31/2006
Agent Agent		-		
phroved by Standaure	Name (Printed Typed)  BRADLEY G. HILL		Date	8-14-0
tle E	NVIRONMENTAL MANAGER			
pplication approval does not warrant or certify that the applicant hold induct operations thereon. onditions of approval, if any, are attached.	ds legal or equitable title to those right	ts in the subj	ect lease which would entitle	the applicant to
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cates any false, fictitious or fraudulent statements or representations as		villfully to m	ake to any department or ager	ncy of the United

\*(Instructions on page 2)

Federal Approval of this Action Is Necessary

RECEIVED
AUG 07 2006 RECEIVED

DIV. OF OIL, GAS & MINING

TRUST LANGE CONTRACTOR

# T5S, R20E, S.L.B.&M.

N89'46'W 79.90 (G.L.O.) N89°48'56"W - 2635.96' (Meas.) Found 1937 Found 1920 Brass Cap, Pile Brass Cap, Pile of Stones of Stones (Meas. **WELL LOCATION:** N00.05'14"W TWELVEMILE WASH 11-13-5-20 ELEV. UNGRADED GROUND = 5265.8' Found 1920 Found 1937 Brass Cap, Pile Brass Cap, of Stones earings) 1984 (Measured) (Basis of Be 1899, Found 1937 Brass Cap, Pile Found 1937 Brass Cap. of Stones

N89°48'W 79.96 (G.L.O.)

#### = SECTION CORNERS LOCATED

(G.L.0.

N0.01

BASIS OF ELEVATION IS A SPOT ELEVATION AT THE INTERSECTION OF HIGHWAY 40 AND HIGHWAY 219 (88) WHICH IS LOCATED IN THE NE 1/4 OF SECTION 8, T6S, R2DE, S.L.B.&M. THE ELEVATION OF THIS INTERSECTION IS SHOWN ON THE VERNAL SW 7.5 MIN. QUADRANGLE AS BEING 5100'.

 $N89^{51'}47''W - 2637.58'$  (Meas.)

TWELVEMILE WASH 11-13-5-20 (Proposed Well Head) NAD 83 Autonomous

LATITUDE = 40° 22′ 50.25″ LONGITUDE = 109° 37′ 31.44″

# THE HOUSTON EXPLORATION COMPANY

WELL LOCATION, TWELVEMILE WASH 11-13-5-20, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 13, T5S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.

#### NOTES:

- Well footages are measured at right angles to the Section Lines.
- 2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER AN COURTE AND THAT THE SAME ARE TRUE AND CORREST TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED LAND SURVEYOR
REDISTRATION NO. 300251 X
STATE OF URALITY OF UT

# TIMBERLINE LAND SURVEYING, INC.

38 WEST 100 NORTH. - VERNAL, UTAH 84078 (435) 789-1365

SHEET

OF 10

DATE SURVEYED: 11-25-05	SURVEYED BY: K.R.K.
DATE DRAWN: 11-30-05	DRAWN BY: M.W.W.
SCALE: 1" = 1000'	Date Last Revised: 8-1-06

# Ten Point Plan

**The Houston Exploration Company** 

**Twelvemile Wash 11-13-5-20** 

Surface Location NE 1/4 SW 1/4,

Section 13, T. 5S., R. 20E.

# 1. Surface Formation Uintah

#### 2. Estimated Formation Tops and Datum:

Formation		Depth	Datum
Uintah		Surface	5,266'G.R.
Birds Nest	Water	3,500'	1,766'
Green River	Oil/Gas	4,500'	766'
Wasatch	Oil/Gas	7,300'	-2,034'
TD		10,500'	-5,732'

A 17 ½" hole will be drilled to 3,900' +/-. The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest. All fresh water and oil and gas baring zones shall be protected by casing and cement program.

## 3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, and their sub-members.

#### 4. Proposed Casing:

Hole	Casing			Coupling	Casing	
<u>Size</u>	<u>Size</u>	Weight/FT	<u>Grade</u>	& Tread	Depth	New/Used
30	26	68.75#	A430		40'	NEW
24	20	94#	H-40	ST&C	350°	NEW
17 ½	13 3/8	72#	N-80	ST&C	3,900'	NEW
11	8 5/8	36#	K-55	LT&C	7,000°	NEW
7 7/8	4 1/2	11.6#	N-80	LT&C	7,700'	NEW
7 7/8	4 1/2	13.5#	P-110	LT&C	10,500	NEW

#### **Cement Program:**

#### Conductor casing #1 will be cemented as follows from 0'-40':

Note: Cement Volume = Gauge hole + 50%

	Casing Size	Cement <u>Type</u>	Cement Amounts	Cement <u>Yield</u>	Water <u>Mix</u>	Cement Weight
Lead:	26	Portland CMT Class IA 4 Integral Air-entraining		1.15ft³/sk	5	15.8 ppg

# Conductor casing #2 will be cemented as follows from 0'- 350': Cement volume = Gauge hole + 50%

	Casing	Cement	Cement	Cement	Water	Cement
	<u>Size</u>	<u>Type</u>	Amounts	<u>Yield</u>	<u>Mix</u>	Weight
Lead:						
	20	Portland CMT Class "G" 2% Calcium Chloride 1/4#/sk Flocele	247 sks +/-	1.5ft³/sk	5	15.8 ppg

# The Surface Casing will be cemented as follows from 0'- 3,900': Cement volume = Gauge hole + 25%

Ceme	ent volume	= Gauge hole +	25%			
	Casing	Cement	Cement	Cement	Water	Cement
	Size	<u>Type</u>	<u>Amounts</u>	<u>Yield</u>	<u>Mix</u>	Weight
Lead:						
	13 3/8"	Premium "5" 16% Gel 10#/sk Gilsonite 3% Salt 3#/sk GB3 0.25#/sk flocele	742 sks. +/-	3.82ft <sup>3</sup> /sk	23	11.0 ppg
Tail:						
	13 3/8"	Class "G" 2% Calcium Chlo 0.25#/sk Flocele	589 sks. +/- oride	1.18ft <sup>3</sup> /sk	5	15.6 ppg
Top J	ob:					
1		Class "G" 4% Calcium Chlo 0.25#sk Flocele	10-200 sks. +/-	1.15ft³/sk	5	15.8 ppg

# <u>Intermediate casing will be cemented as follows from 3,700'- 7,000':</u> Cement volume = Gauge hole + 25%

	Casing Size	Cement Type	Cement Amounts	Cement <u>Yield</u>	Water <u>Mix</u>	Cement Weight
Lead:						
	8 5/8"	50/50 POZ'G 5% Salt (BWOW) 0.6% HALAD 322 0.25#/sk Flowcele 0.2% Super CBL 2% Micro Bond	1,361 sks +/-	1.25ft <sup>3</sup> /sk	5.26	14.35 ppg

# Production casing will be cemented as follows from 6,800'- 10,500:

Note: Lead should be 200' above the Wasatch.

Cement volume = Gauge hole + 25%

	Casing <u>Size</u>	Cement <u>Type</u>	Cement Amounts	Cement <u>Yield</u>	Water <u>Mix</u>	Cement Weight
Lead:	4 ½	PREM.AG300 50/50 POZ "G" CM7 2% Gel 0.4% Halad 344 0.25% HR-12 0.2% CFR-3 5#/sk Sillicalite	608 sks +/- Г	1.73ft³/sk	8.17	13.5 ppg
		20% SSA-1 0.25#/sk Flowcele 0.2% Super CBL				

#### 5. BOP and Pressure Containment Data:

A 5000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 13 3/8" surface casing. An upper kelly cock to the required pressure rating with a handle available shall be employed.

The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

# 6. Mud Program:

Interval	Mud weight <u>lbs./gal.</u>	Viscosity Sec./OT.	Fluid Loss Ml/30 Mins	Mud Type
0-3,900 3,900-T.D.	Air/Clear Water 8.4-12.0	30-45	No Control 8-10	Water/Gel LSND water based mud system

**Note:** Mud weights may exceed 12.0 due to solids increasing at or near T.D. Increased weights are not required to control formation pressure. Operator will have on location sufficient mud and weight material to increase mud weight to 12.0 at any time while drilling the subject well. Visual mud monitoring incorporating pit level indicators shall be used.

#### 7. Testing, Coring, Sampling and Logging:

DST: a)

None are anticipated.

Coring: b)

There is the possibility of sidewall coring.

c)

Mud Sampling: Every 10' from 3,900' to T.D.

Logging: d)

Type

Interval

DLL/SFL W/GR and SP

T.D. to Surf. Csg

FDC/CNL W/GR and CAL T.D. to Surf. Csg

#### 8. Abnormalities (including sour gas)

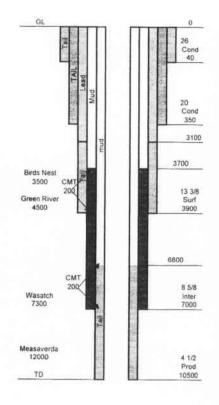
Anticipated bottom hole pressure will be less than 5000 psi. No abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered over pressured zones or H2S.

#### 9. Other facets of the proposed operation:

Off set well information None

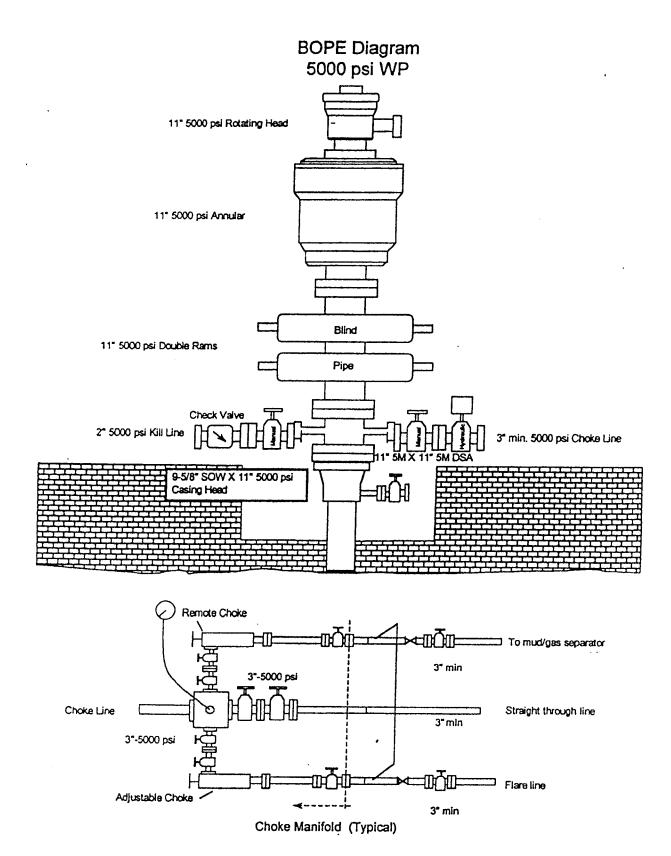
# 10. Drilling Schedule:

The anticipated starting date is 1/01/2007. Duration of operations is expected to be 30 days.



Proposed Ca				20	-	14-Jul-2006 8 00	21-Jul-2006 13:00	,	
			-	,			-		
	Open	Csg	Csg	Csg	Csg	Csg Setting	1000	Internal	-7
	Size	Size	Wi	Grade	Coupling &	Depth	Csg New/Used		offapt SI
	1000	All the same of	111 11111				THE WOOD CO	فيحتضيه	
Conductor #1		28	68,75	A430		40	New	500	
Conductor #2	24	20	94	H-40	ST&C	350	New	2110	
Surface ntermidiate	17 1/2	13 3/8 8 5/8	72	N-80	ST&C	3900	New	5380	2
Production	7 7/8	4 1/2	36	K-55	LT&C	7000	New	3930	2
roduction	7 7/8	4 1/2	11.6	N-80 P110	LT&C LT&C	7700 10500	New	7780 12410	100
			-				Tive W	12410	100
stimated Fo	rmation	Tops and Da		1 6					
Formation	-		Depth	Datum					
Jintah			Surface	5266	1				
Birds Nest			3500	1766	1				
Green River			4500	766	]				
Wasatch	_		7300	-2034					
Measaverda ID	-		12000	-6734 -5234					
	-		10200	-5254	1				
Cement Prog	ram	7							
Conductor C									
	Casing	Cement			Cement	Cement	Mix	Cement	
	Size	Type			Amount Sks	Yield Cuft/sk	Water Gal/sk	Weight	
	3.7	San and the san an	10==		UNA	CHIVAN	Gairsk	Ppg	
.ead	26	Portland C	MT	WED S	118	1.15	5	15.8	
Ор	0	Class IA 4							
Battom	40	Integral Air	-entraining	Agent					
			DUITE S						
		-	15 (17)						
onductor Co	ement Vo	lume Calcul	ation #1		1			43	
				SUCK S	1.110007	0.00	Cement	1	
- 1		1 :		Hole	Hole	Cement	Amount		
	Тор	Bottom	Ft/hole	Volume	Volume Bbis	Amount	w/50%	1.5	
100	TOP	DOMON	TVIIIIE	Can	DOIS	SKS	Excess		
and	0	40	40	135	24	118	176		
				-			1,10	,	
Conductor Ca			1						
	Csg	Hole Size	FI	Coeff	Coeff	Annulas	FALUATI		Bbls/I
	In:	in.	Hole	Cuft/ft	Bbls/ft	30 X 26	68#XOH	3.3816	602
1	ILITERIO			- Contract	DOGGE				
ead	26	30	40	3.3816	0.6023				
		-							
onductor Ca									
- 1					Cement				
	Casing	Cement				Cement	Mix	Cement	
	Size	Туре			Amount	Yield	Water	Weight	
				NDS.					
	Size	Type Portland Cl	мт		Amount	Yield	Water	Weight	
each op	Size 0	Portland Cl			Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
ор	Size	Portland CF Class "G" 2% Calcium	n Chloride		Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
ор	Size 0	Portland Cl	n Chloride		Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
ор	Size 0	Portland CF Class "G" 2% Calcium	n Chloride		Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
ottom	0 0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele		Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
	0 0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele		Armount Sks	Yield Cuft/sk	Water Gal/sk	Weight Ppg	
ottom	0 0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele	Male	Amount Sks	Yield Cuff/sk	Water Gal/sk	Weight Ppg	
ottom	0 0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele	Hole	Amount Sks 247 Hole	Yield Cuffrsk 1.5	Water Gal/sk 5	Weight Ppg	
ottom	0 0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele	Hole Volume Cutt	Amount Sks	Yield Cuff/sk	Water Gal/sk 5	Weight Ppg	
op ottom	O O O O O O O O O O O O O O O O O O O	Portland Ci Class "G" 2% Calciun 1/4#/Sk Flo	n Chloride cele ation # 2	Volume Cuft	Amount Sks 247 Hole Volume	Yield Cuff/sk 1.5 Cement Amount	Water Gai/sk 5 5 Cement Amount w/50%	Weight Ppg	
op ottom	0 0 350	Portland CF Class "G" 2% Calcium 1/4#/Sk Flo	n Chloride cele ation # 2 Ft/hole	Volume Cuft 60	Amount Sks 247 Lose Lose Lose Lose Lose Lose Lose Lose	Yield Curtrisk 1.5 Cement Amount sks	Water Gal/sk 5 Cement Amount W50% Excess	Weight Ppg	
op ottom	O O O O O O O O O O O O O O O O O O O	Portland Ci Class "G" 2% Calciun 1/4#/Sk Flo	n Chloride cele ation # 2	Volume Cuft	Amount Sks 247  Hole Volume Bbis	Yield Cuffrsk 1.5 Cement Amount sks	Water Gal/sk  S  Cement Amount w/50% Excess	Weight Ppg	
op ottom	0 0 0 350 Top 0 40	Portland Cr Class 'G' 2% Calcium 1/4#/Sk Flo buttom 40 350	ation # 2  Ft/hole  40  310	Volume Cuft 60	Amount Sks 247 Lose Lose Lose Lose Lose Lose Lose Lose	Yield Curtrisk 1.5 Cement Amount sks	Water Gal/sk 5 Cement Amount W50% Excess	Weight Ppg	
op ottom	O O 350  Top D 40  sing Cen	Portland Cr Class 'G' 2% Calcium 1/4#/Sk Flo buttom 40 350	ation # 2  Ft/hole  40  310	Volume Cuft 60	Amount Sks 247 Lose Lose Lose Lose Lose Lose Lose Lose	Yield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk 5 Cement Amount W50% Excess	Weight Ppg 15.8	ili) kurik
op ottom	Top  O  O  Sing Cerr  Csg  Size	Type  Portland Ct Class "G" 2% Calcium 1/4#/Sk Flo  ume Calcul  Bottom 40 350 hent Data # 2  Hole Size	ation # 2  Ft/hole  40  310	Volume Cuft 60 38	Amount Sks 247 Lose Lose Lose Lose Lose Lose Lose Lose	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk 5 Cement Amount W50% Excess	Weight Ppg 15.8	
op ottom	o o o o o o o o o o o o o o o o o o o	Portland Cr. Class "G" Class "G" Class "G" Bottom  40 350 Hole Hole	Chloride cela ation #2  Ft/hole 40 310	Volume Cuft 60 38	Amount Sks 247  Hole Volume Bbis 11 7	Yield Cuff/sk 1.5 1.5 Cement Arribount sks 40 207	Water Gal/sk 5 Cement Amount w/50% Excess 60 310	Weight Ppg 15.8 15.8 15.5 1.5	268
onductor Ca	Top  O  Size  O  O  Size  Top  Csg  Size In.	Portland Cr. Class "G" Class "G" Class "G" Live Calcium Live Calcium Bottom 40 350 Live Calcium Hole Size In	Chloride cele ation #2 Fl/hole 40 310 Ft Hole	Volume Cult 60 38 Coeff Cult/ft	Amount Sks 247  Hole Volume Bbis 11 7  Coeff Bbis/ft	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk  5  Cement Amount w/50% Excess 60 310	Weight Ppg 15.8 15.8 15.5 1.5	268
onductor Ca	Top  D  40  Size  In.	Type  Portland Cl. Class "G" 2% Calcium 1/48/Sk Flo  ume Calcul  Bottom 40 350  tent Data # 2  Hole Size in	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls 11 7  Coeff Bbls/ft 0.2661	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk  5  Cement Amount w/50% Excess 60 310	Weight Ppg 15.8 15.8 15.5 1.5	268
onductor Ca	Top  O  Size  O  O  Size  Top  Csg  Size In.	Portland Cr. Class "G" Class "G" Class "G" Live Calcium Live Calcium Bottom 40 350 Live Calcium Hole Size In	Chloride cele ation #2 Fl/hole 40 310 Ft Hole	Volume Cult 60 38 Coeff Cult/ft	Amount Sks 247  Hole Volume Bbis 11 7  Coeff Bbis/ft	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk  5  Cement Amount w/50% Excess 60 310	Weight Ppg 15.8 15.8 15.5 1.5	3b)s./ri 2681
onductor Ca	Top  O  Size  O  O  O  Size  O  O  O  O  O  O  O  O  O  O  O  O  O	Type  Portland Cl. Class "G" 2% Calcium 1/48/Sk Flo  ume Calcul  Bottom 40 350  tent Data # 2  Hole Size in	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls 11 7  Coeff Bbls/ft 0.2661	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk  5  Cement Amount w/50% Excess 60 310	Weight Ppg 15.8 15.8 15.5 1.5	2681
onductor Ca	Top  O  Size  O  O  O  Size  O  O  O  O  O  O  O  O  O  O  O  O  O	Type  Portland Cl. Class "G" 2% Calcium 1/48/Sk Flo  ume Calcul  Bottom 40 350  tent Data # 2  Hole Size in	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls 11 7  Coeff Bbls/ft 0.2681 0.171	Vield Cuff/sk 1.5 Cement Amount sks 40 207 Annulas 26X 20 24 X 20	Water Gal/sk  5  Cement Amount w/50% Excess  60 310  66.75#X94#  94#/OH	Weight Ppg 15.8 15.8 15.8 1.5 8 1.5	2681
onductor Ca	Top  Top  Size  O  O  O  O  O  O  O  O  O  O  O  O  O	Type  Portland Cl Class "G" 2% Calcium 1/48/Sk Flo  ume Calcul  Bottom 40 350  tent Data # 2  Hole Size in	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls 11 7  Coeff Bbls/ft 0.2661	Vield Cuff/sk 1.5 Cement Amount sks 40 207	Water Gal/sk  5  Cement Amount w/50% Excess 60 310	Weight Ppg   15.8   15.	268
onductor Ca	Top  Top  O  Size  O  O  O  Size  Top  O  Csg  Size  In.  Z6  Z4	Type  Portland Cl Class "G" 2% Calcium 1/4#/Sk Flo  ume Calculi  Bottom 40 350 tent Data # 2  Hole Size In.  24 20  Cement	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls 11 7  Coeff Bbls/ft 0.2681 0.171  Cement	Vield Cuff/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement	Water Gal/sk  5  Cement Amount w/50% Excess 60 310  68 75#X94# 94#/OH	Weight Ppg 15.8 15.8 15.8 1.5 8 1.5	268
onductor Ca	Top  Top  O  Size  Top  O  Size  In  Cag  Size  In  Casing  Size	Type  Portland Cl. Class "G" 2% Calcium 1/4#/Sk Flo  ume Calculi  Bottom 40 350 tent Data # 2  Hole Size In.  24 20  Cement Type	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681
op ottom conductor Ce conductor Ce conductor Ca conductor	Top  O  O  O  O  O  O  O  O  O  O  O  O  O	Premium 5	Chloride cele ation # 2  Ft/hole 40 310  Ft Hole 40	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbis 11 7  Coeff Bbis/ft 0.2681 0.171	Yield Cuff/sk 1.5 1.5 Cement Amount sks 40 207 Annulas 26X 20 24 X 20 Cement Yield	Water Gal/sk  S  Cement Amount Amount w/50% Excess 60 310  88.75#X94# 94#/OH  Mix Water	Weight Ppg 15.8 15.8 15.8 15.8 15.9 15.9 15.9 15.9 15.9 15.9 15.9 15.9	2681
op ottom  conductor Ca  and  con	Top  Top  Top  Size  Top  Cag  Size  Cag  Size  13 3/8	Type  Portland Cl Class "G" 2% Calcium 1/48/Sk Flo  Bottom 40 350  cent Data # 2  Hole Size in  Cerment Type  Premium 5 16% Gel	FUhole 40 310 Ft Hole 40 310	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681
op ottom  conductor Ca  and  con	Top  O  O  O  O  O  O  O  O  O  O  O  O  O	Type  Portland Cl. Class "G" 2% Calcium 1/4#/Sk Flo  ume Calculi  Bottom 40 350 tent Data # 2  Hole Size In.  Cement Type  Premium 5 16% Gel 10 #/sk glisk glisk	FUhole 40 310 Ft Hole 40 310	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681
ottom	Top  Top  Top  Size  Top  Cag  Size  Cag  Size  13 3/8	Type  Portland Cl Class "G" 2% Calcium 1/48/Sk Flo  Bottom 40 350  cent Data # 2  Hole Size in  Cerment Type  Premium 5 16% Gel	FUhole 40 310 Ft Hole 40 310	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681
op ottom  conductor Ca  and  con	Top  Top  Top  Size  Top  Cag  Size  Cag  Size  13 3/8	Type  Portland CI Class "G" 2% Calcium 1/48/Sk Flo  ume Calcul  Bottom 40 350  ent Data # 2  location 24 20  Cement Type  Premium 5 16% Gas 3% Salt 3% Salt 3% Salt	r Chloride cela ation # 2  Ft/hole 40 310  Ft Hole 40 310	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681
onductor Cases and seed onductor Cases and seed onductor Cases and seed onductor Cases and seed on the case of the	Top  Top  Top  Size  Top  Cag  Size  Cag  Size  13 3/8	Type  Perland Cl. Class "G" 2% Calcium 1/4#/Sk Flo  Bottom 40 350  tent Data # 2  Hole Size In.  24 20  Cement Type  Premium 5 15% Get 10 #kk gilss 3% Salt 3% Salt 3% Salt 3% Salt	r Chloride cela ation # 2  Ft/hole 40 310  Ft Hole 40 310	Coeff Cuft/ft	Amount Sks 247  Hole Volume Bbls  11 7  Coeff Bbls/ft  0.2681 0.171  Cement Amount Sks	Vield Cuft/sk  1.5  Cement Amount sks  40 207  Annulas 28X 20 24 X 20  Cement Yield Cuft/sk	Cement Amount w/50% Excess 60 310 Mix Water Gal/sk	Weight Ppg   15.8   15.	2681

Bottom	3900	25 #sk flo			4				
Top Job		Class "G" 4% Calcru 25 #/sk flo	m Chloride icele		10-200 sks	1.15	5	15.8	
urface Cen	nent Volun	ne Calculati	on	1					•
		T		Hole	Hole	Cement	Cement	7	
	Тор	Bottom	Ft/hole	Volume Cuft	Volume Bbls	Amount sks	Amount w/25% Excess	1.25	]
ead ead	350	350 3100	350 2750	357 1910	64 340	93 500 Total	117 625 742		
all vivings	3100	3900	800	556	99	471	589	1	
urface Cas	ing Cemer	t Data Hole					,		
	Csg Size In	Size In.	Ft Hole	Coeff Cutt/ft	Coeff Bbis/ft	Annulas 20 X 13 3/8 17 5 X 13 3/8	94#/68# 68#/OH	1.019 0.6946	0.181 0.123
ead	13 3/8	12 5/7	350	1.019	0.1815				
ead all	13 3/8	12 1/4	2750 800	0.6946	0.1237				
termediate		1							
	Casing Size	Type			Cement Amount Sks	Cement Yield Cuft/sk	Mix Water Gal/sk	Cement Weight Ppg	
	8 5/8	50/50 POZ			1361	1.25	5.26	14.35	
op ottom	7000	5% Salt (B 6% HALAI 25#/sk Flo 2% SUPE 2% Micro E	0 322 wcele R CBL						
termediate	Cement V	olume Calc	ulation					,	ŀ
	Тор	Bottom	Ft/hole	Hole Volume Cuft	Hole Volume Bbls	Cement Amount sks	Amount w/25% Excess	1.25	
	3700	3900	200	87	16	12	12	4	
2.004	3900	7000	3100	1348	240	1079 Total	1348 1361	1	
terdediate	Casino Ce	ment Data					1001		í.
	Csg Size In	Hole Size In	Ft Hole	Coeff Cuft/ft	Coeff Bbls/ft	Annulas 13 5/8 X 8 5/8 11 X 8 5/8	68#/36# 36#/OH	0.4349 0.2016	0.0775 0.0356
	8 5/8 8 5/8	10 3/4	200 3100	0.4349	0.0775 0.0359				
oduction C	asing	1							
	Casing Size	Cement Type			Cement Amount sks	Cement Yield Cuft/sk	Mix Water Gal/sk	Cement Weight	
ad	4 1/2	PREM.AG3		Mark	608	1.73	8.17	13.5	
ottom	0 10500	50/50 POZ 2% GEL 4%Halad 3 25% HR-12 2% CFR-3 5#/sk Silica	44 2 lite						
		20% SSA-1 25#/sk FLC 2% Super (					-		
roduction C	ement Vol	25#/sk FLC	CBL				6	,	
roduction C	ement Vol	25#/sk FLC 2% Super (	CBL	Hole Volume Cuft	Hole Volume Bbls	Cement Amount sks	Cement Amount w/25% Excess sks	1 25	
ad ⊫⊞≅		25#/sk FLC 2% Super o ume Calcul	ation	Volume	Volume	Amount	Amount w/25%	1 25	
ad Madad	Top 6800 7000	25#/sk FLC 2% Super ( ume Calcul Bottom 7000 10500	etion  Fuhole  200	Volume Cuft 45	Volume Bbls 8	Amount sks 26	Amount w/25% Excess sks	1 25	
ad Madad	Top 6800 7000	25#/sk FLC 2% Super ( ume Calcul Bottom 7000 10500	etion  Fuhole  200	Volume Cuft 45	Volume Bbls 8	Amount sks 26 461	Amount w/25% Excess sks		Bpls/#
reduction C	Top 6800 7000 asing Cen	25#/sk FLC 2% Super ( ume Calcul Bottom 7000 10500	etion  Fuhole  200	Volume Cuft 45 797	Volume Bbis 8 142	Amount sks 26 461 Total	Amount w/25% Excess sks	Cuft/ft 0 2235 0 2278	Bbls/ft 0.0398 0.0406



# THE HOUSTON EXPLORATION COMPANY 13 POINT SURFACE USE PLAN FOR WELL

TWELVEMILE WASH 11-13-5-20

LOCATED IN NE ¼ SW ¼

SECTION 13, T.5S, R20E, S.L.B.&M.

**UINTAH COUNTY, UTAH** 

**LEASE NUMBER: UTU-76494** 

SURFACE OWNERSHIP: FEDERAL

#### 1. Existing Roads:

## The Houston Exploration Company

Twelvemile Wash 11-13-5-20

Section 13, T. 5S, R. 20E

Proceed in a westerly direction from Vernal, Utah along US Highway 40 approximately 7.4 miles to the intersection of a class D county road. Exit right and proceed in a westerly direction along the class D county road approximately 1.6 miles to the proposed access road. Follow road flags in a northeasterly direction approximately 1,630 feet to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 9.3 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

#### 2. Planned access road

The proposed access road will be approximately 1,630' of new construction and approximately 0.2 miles of two-track upgrade on lease and approximately 6,220' of new construction off lease and approximately 0.2 miles of two-track upgrade off lease. The road will be graded once per year minimum and maintained.

#### A) Approximate length 1630 ft

B) Right of Way width	30 ft
C) Running surface	18 ft
D) Surface material	Native soil
E) Maximum grade	8%
F) Fence crossing	None
G) Culvert	None
H) Turnouts	None
I) Major cuts and fills	None
J) Road Flagged	Yes
K) Access road surface	ownership
	Federal
L) All new construction	on lease
	No
M) Pipe line crossing	No

Please see the attached location plat for additional details.

An off lease right-of-way will be required for approximately 6220' of new construction and approximately 0.2 miles of two-track upgrade.

All surface disturbances for the road and location will be within the lease boundary.

## 3. Location of existing wells

The following wells are located within a one-mile radius of the location site.

A) Producing well	None
B) Water well	None
C) Abandoned well	None
D) Temp. abandoned well	None
E) Disposal well	None
F) Drilling /Permitted well	None
G) Shut in wells	None
H) Injection well	None
I) Monitoring or observation	well
<del>,</del>	None

Please see the attached map for

additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted a Carlsbad Canyon color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is Carlsbad Canyon.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 CFR 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval form the authorized officer.

If the well is capable of economic production a surface gas line will be required.

Approximately 920' of 3" steel surface gas gathering line would be constructed on Federal lands.

The pipeline will tie into the proposed pipeline for the Twelvemile Wash 1-15-5-20 in Section 13, T5S, R20E. The pipeline will be strung and boomed to the south of the location and parallel to the access road. The pipeline line will be buried at water crossings. A temporary construction width of 30' will be required for one week and a permanent width of 15' will be required.

An off lease right-of-way will not be required.

Please see the attached location diagrams for pipeline location.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter.

Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meterproving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah. Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association)

standards for gas and liquid hydrocarbon measurement.

fluids, chemicals, produced fluids, etc.

#### 5. Location and type of water supply

Water for drilling and cementing will come from a Vernal City Tap at 355 S 1000 E (Dalbo/A-1 Tank.)

#### 6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

# 7. Methods for handling waste disposal

#### A) Pit construction and liners:

The reserve pit will be approximately 12 ft. deep and most of the depth shall be below the surface of the existing ground Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semiclosed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling

#### B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

## C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

#### D) Sewage:

A portable chemical toilet will be supplied for human waste.

#### E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

#### 8. Ancillary facilities

There are no ancillary facilities

planned at this time and none are foreseen for the future.

#### 9. Well-site layout

Location dimensions are as follows:

A) Pad length	345 ft.
B) Pad width	260 ft.
C) Pit depth	12 ft.
D) Pit length	150 ft.
E) Pit width	75 ft.
F) Max cut	29.6 ft.
G) Max fill	9.3 ft.
H) Total cut yds.	13,780 cu yds
I) Pit location	North end
D Ton soil location	

J) Top soil location

South end

K) Access road location

L) Flare Pit

South end Corner C

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at leas 42 inches.
- C) Corner posts shall be cemented

and/or braced in such a manner to keep the fence tight at all times.

- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

## 10. Plans for restoration of the surface

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately 1,500 cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be recontoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

#### A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed. The seed mix and quantity list will be used whether the seed is broadcast or drilled.

#### B) Interim Seed Mix

4#/acre Indian Rice Grass 4#/acre Crested Wheat Grass 4#/acre Needle & Thread Grass

#### 11. Surface ownership:

#### Access road

Federal Location Federal Pipeline Federal

#### 12. Other information:

#### A) Vegetation

The vegetation coverage is slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

#### B) Dwellings:

There are no dwellings or other facilities within a one-mile radius of the location.

#### C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity

(subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported promptly to the surface management agency.

#### D) Water:

The nearest water is The Green River, 10 miles to the Southeast.

#### E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

#### F) Notification:

- a) Location Construction At least forty eight (48) hours prior to construction of location and access roads.
- b) Location completion prior to moving on the drilling rig.
- c) Spud notice At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing
  At least twenty-four (24) hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests
  At least twenty-four (24) hours prior to initial pressure tests.

f) First production notice Within five (5) business days after the new well begins, or production resumes after well has been off production for more than 90 days.

#### G) Flare pit:

The flare pit will be located in **corner** C of the reserve pit out side the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

# 13. Lessees or Operator's representative and certification

#### A) Representative

William A. Ryan Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

Office 435-789-0968 Fax 435-789-0970 Cellular 435-828-0968

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval.

After permit termination, a new application will be filed for approval for any future operations.

#### B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston **Exploration Company and its** contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Onsite Dates: 5/30/06

**Self Certification Statement** 

The following self-certification statement is provided per Federal requirements dated June 15, 1988.

Please be advised that The Houston Exploration Company is considered to be the operator of the following well:

Twelvemile Wash 11-13-5-20 Section 13, T. 5S, R. 20E NE ¼ of the SW ¼ Lease UTU-76494 Uintah County, Utah

The Houston Exploration Company is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond UTU-104155044 provides statewide bond coverage on all Federal Lands.

Date 7/31/06

William A. Ryan Agent
Rocky Mountain Consulting

# Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for The Houston Exploration Company Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

435-789-0968 Office 435-828-0968 Cell 435-789-0970 Fax

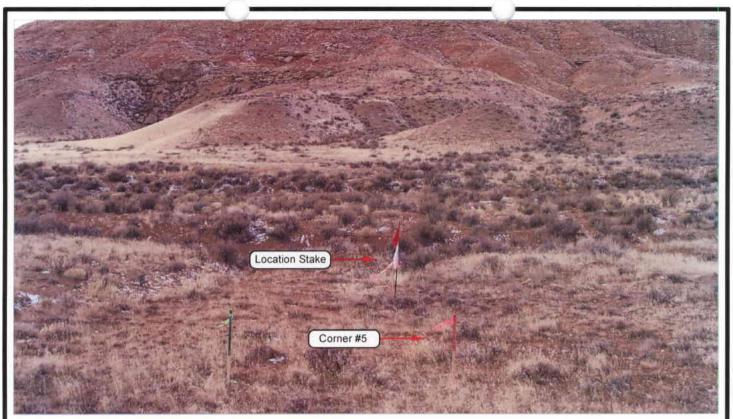


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY

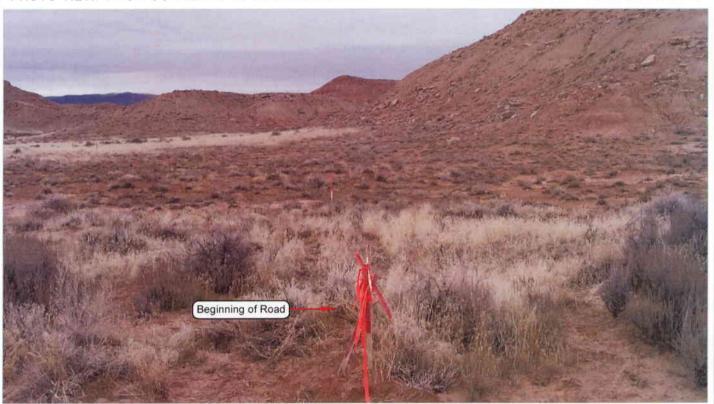


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHERLY

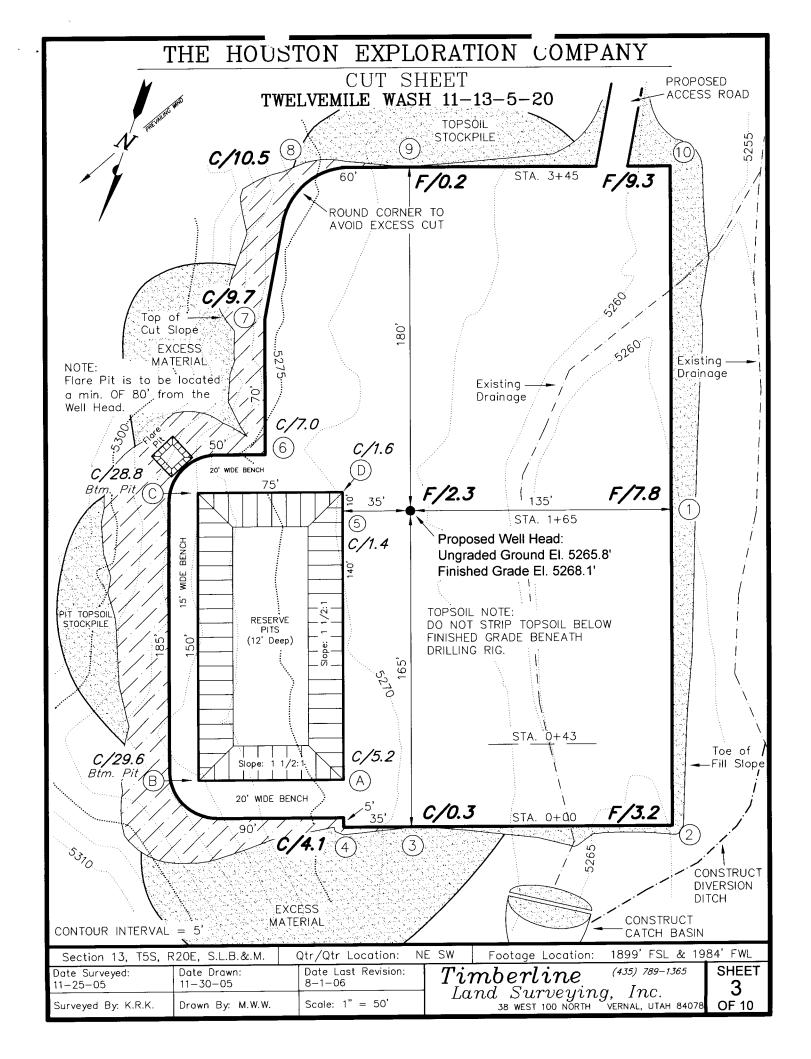
#### THE HOUSTON EXPLORATION COMPANY

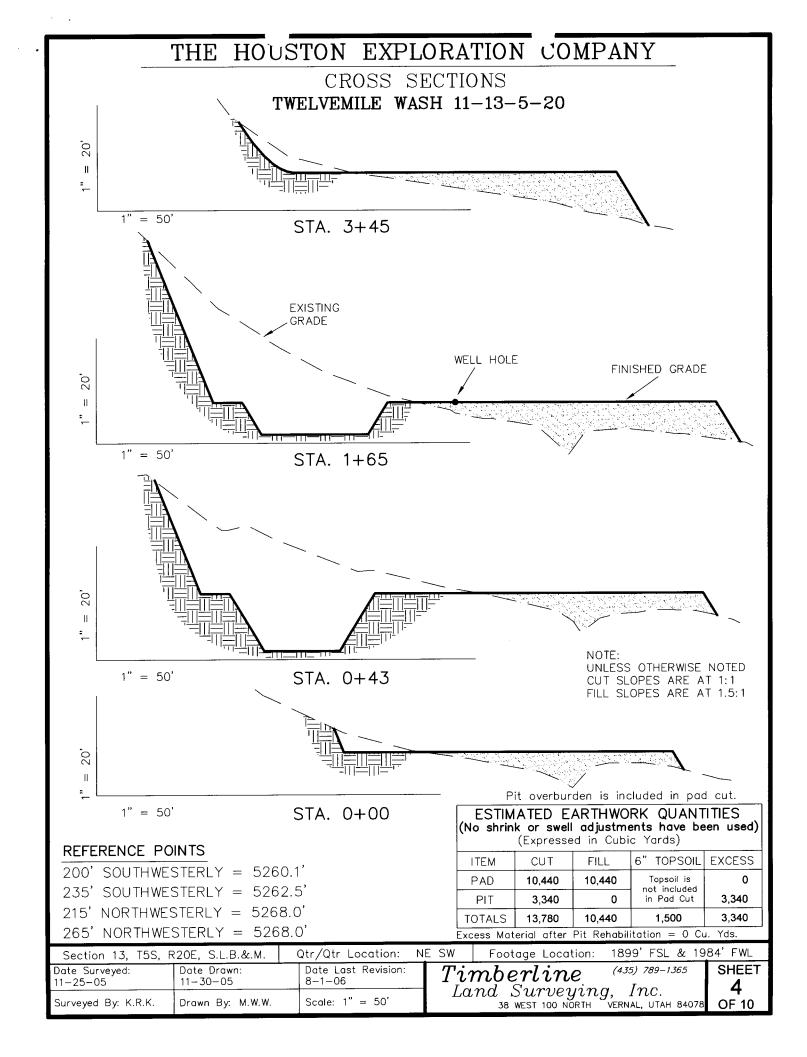
Twelvemile Wash 11-13-5-20 SECTION 13, T5S, R20E, S.L.B.&M. 1899' FSL & 1984' FWL

I OC ATION	PHOTOS	DATE TAKEN: 11-25-05
LOCATION PHOTOS		DATE DRAWN: 11-30-05
TAKEN BY: K.R.K.	DRAWN BY: BJ.Z.	REVISED: 8-1-06

Timberline Land Surveying, Inc.
38 West 100 North Vernal, Utah 84078
(435) 789-1365

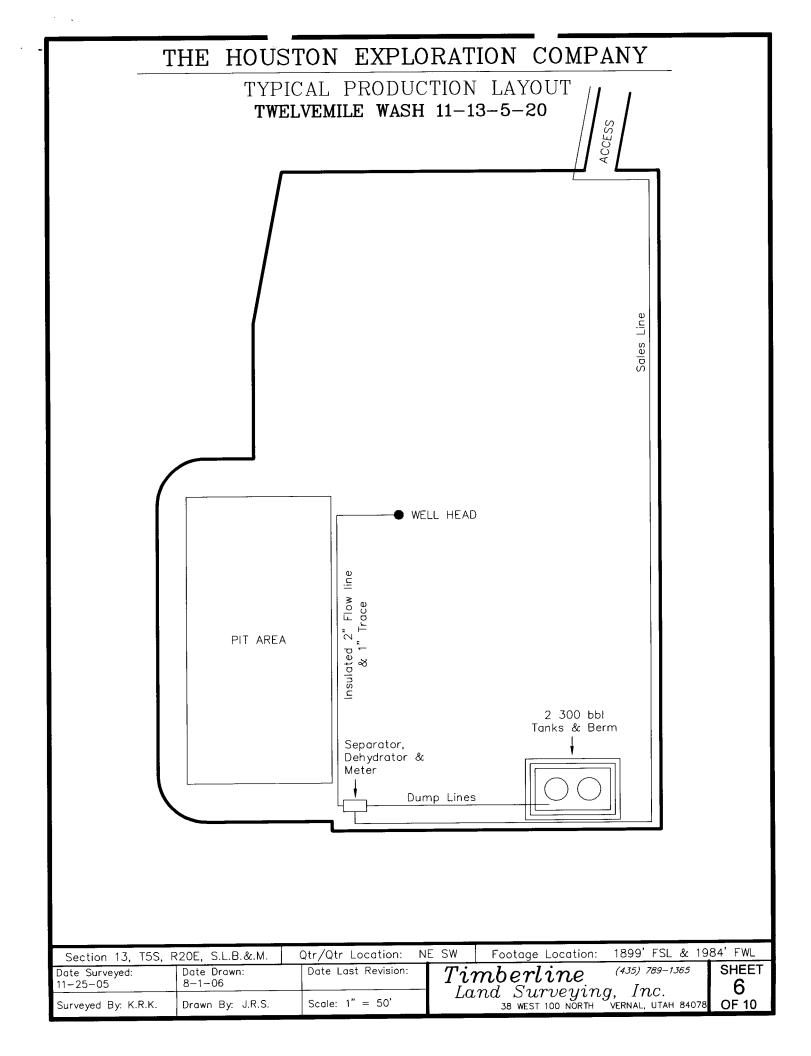
SHEET 1 OF 10

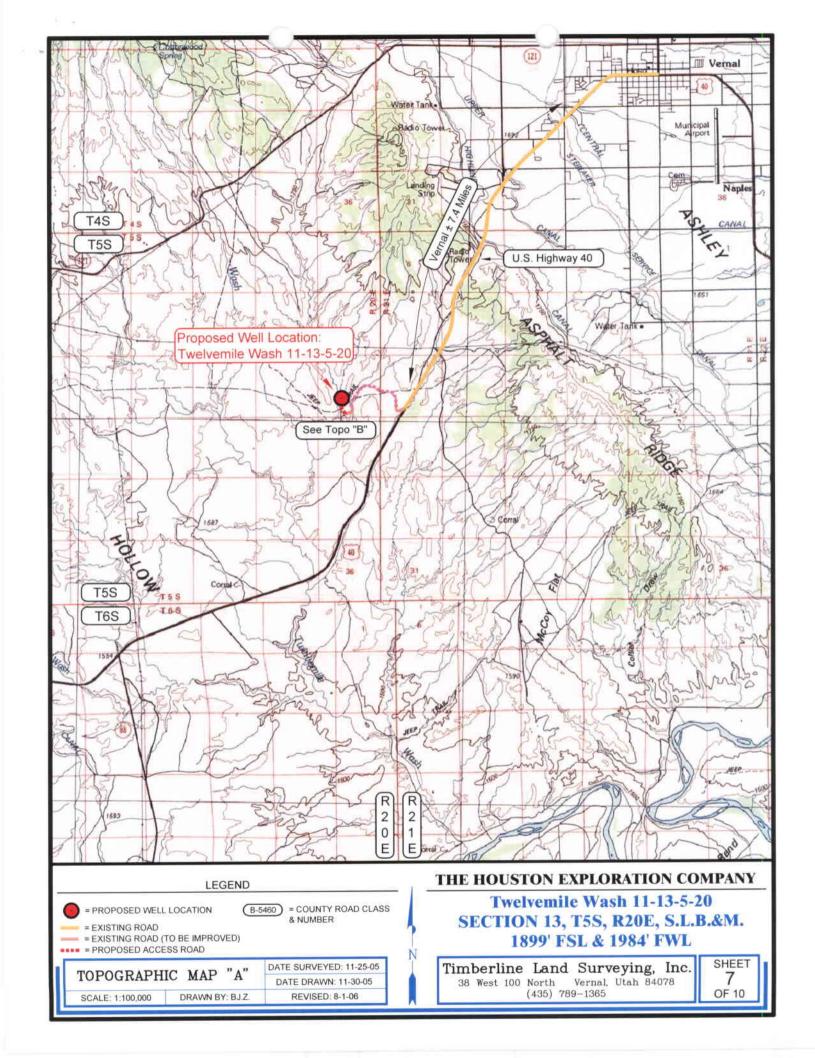


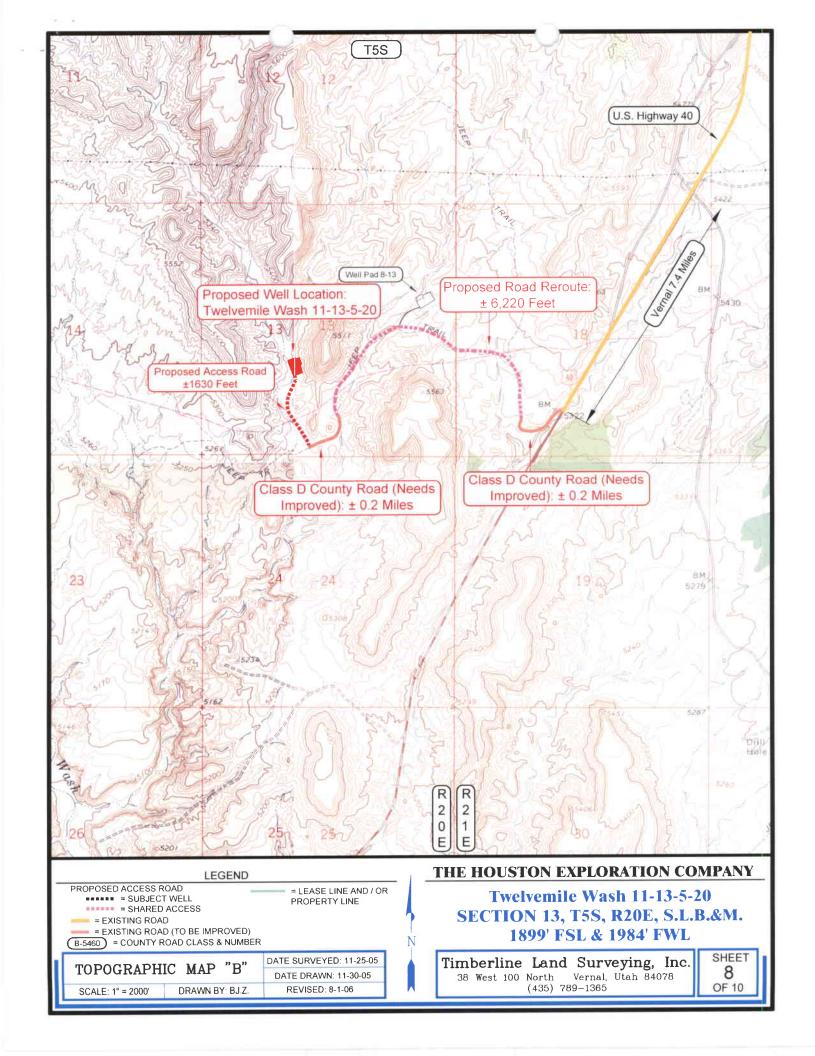


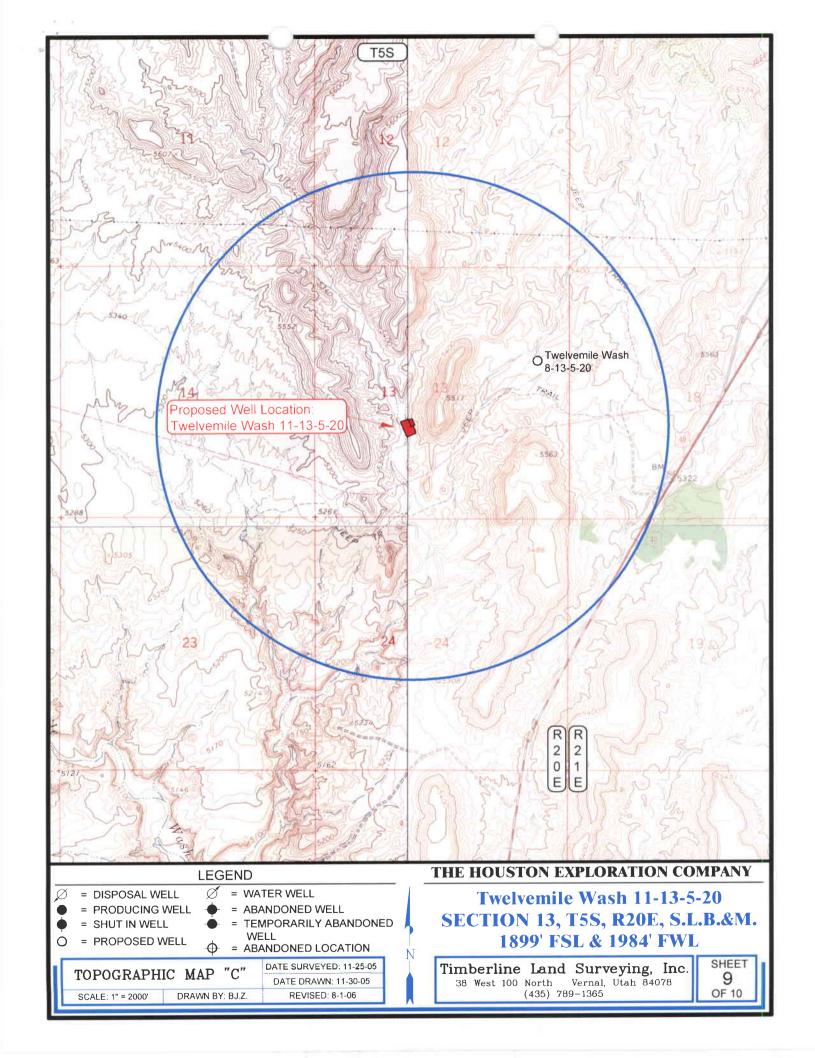
# HOUSTON EXPLORATION COMPANY THE TYPICAL RIG LAYOUT TWELVEMILE WASH 11-13-5-20 PROPOSED ACCESS ROAD 60' 50' 20' WIDE BENCH DOG\_HOUSE 135' WATER RIG TANKS 140 PUMP RESERVE PITS VOLUME: 12,400 bbls W / Freeboard MUD SHED TOILET [ 185, 150, HOPPER POWER TOOLS Slope: 1 1/2:1 STORAGE TANK /

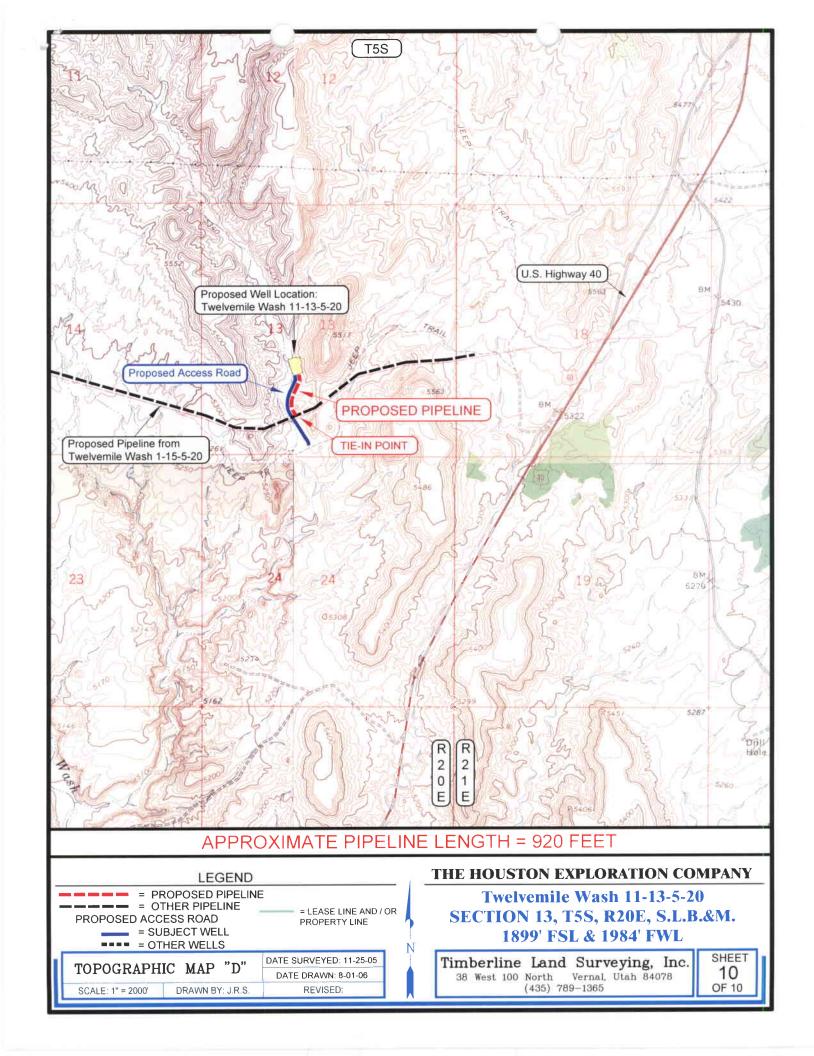
Section 13, T5S,	R20E, S.L.B.&.M.	Qtr/Qtr Location:	NE SW	Footage Location:	1899' FSL & 19	84' FWL
Date Surveyed: 11-25-05	Date Drawn: 11-30-05	Date Last Revision: 8—1—06		mberline	(435) 789-1365	SHEET 5
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 50'	La	nd Surveyin	$g,\ Inc.$ vernal, utah 84078	OF 10











# WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/07/2006	API NO. ASSIGNED: 43-047-38437
WELL NAME: TWELVEMILE WASH 11-13-5-20 OPERATOR: HOUSTON EXPLORATION CO, ( N2525 ) CONTACT: BILL RYAN	PHONE NUMBER: 713-830-6800
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
NESW 13 050S 200E	Tech Review Initials Date
SURFACE: 1899 FSL 1984 FWL BOTTOM: 1899 FSL 1984 FWL	Engineering
COUNTY: UINTAH	Geology
LATITUDE: 40.38067 LONGITUDE: -109.6248	Surface
UTM SURF EASTINGS: 616738 NORTHINGS: 4470' FIELD NAME: WILDCAT ( 1	/06
LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-76494  SURFACE OWNER: 1 - Federal	PROPOSED FORMATION: WSTC COALBED METHANE WELL? NO
RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:
✓ Plat         ✓ Bond: Fed[1] Ind[] Sta[] Fee[]         (No. 104155044 )         ✓ Potash (Y/N)         ✓ Oil Shale 190-5 (B) or 190-3 or 190-13         ✓ Water Permit (No. MUNICIPAL )         RDCC Review (Y/N)         (Date:)         MM         Fee Surf Agreement (Y/N)         MM         Intent to Commingle (Y/N)	R649-2-3.  Unit:
STIPULATIONS: 1- Leas (Ayeraya	
2- Spacing She	

	T5S R20E			T5S R21E
9	10 N20E	и	Ω	7
16	TWELVEMILE WASH 1-15-5-20 €	14	TWELVEMILE WASH 11-13-5-20	18
21	TWELVE MILE FED A 1	23	24	в
	TWELVE MILE FED 1	36	25	30
		Wells Status  GAS INJECTION GAS STORAGE  LOCATION ABANDONED NEW LOCATION PLUGGED & ABANDONED PRODUCING GAS PRODUCING OIL SHUT-IN GAS SHUT-IN OIL TEMP. ABANDONED TEST WELL WATER INJECTION WATER SUPPLY WATER DISPOSAL ORIGINAL	Utah Oil Gas and  N E PREPARED BY: DIANA WHI DATE: 11-AUGUST-2006	



# State of Utah

## **Department of Natural Resources**

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

> JOHN R. BAZA Division Director

JON M. HUNTSMAN, JR. Governor

> GARY R. HERBERT Lieutenant Governor

> > August 14, 2006

**Houston Exploration Company** 1100 Louisiana, Ste. 2000 Houston, TX 77002

Re: Twelvemile Wash 11-13-5-20 Well, 1899' FSL, 1984' FWL, NE SW, Sec. 13, T. 5 South, R. 20 East, Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38437.

Sincerely,

Gil Hunt

Associate Director

pab **Enclosures** 

Uintah County Assessor cc:

Bureau of Land Management, Vernal District Office

Operator:	Houston Exploration Company		
Well Name & Number	Twelve	mile Wash 11-13-5-20	
API Number:	43-047-	38437	
Lease:	UTU-76494		
Location: <u>NE SW</u>	Sec. 13	T. 5 South	<b>R.</b> 20 East

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

## 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

# RECEIVED

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

AUG 0 2 2006

5. Lease Serial No. UTU-76494

BUREAU OF LAND MA	ANAGEM	FNT AUGUZZ	000	010-70494	
APPLICATION FOR PERMIT TO				6. If Indian, Allotes	or Tribe Name
la. Type of work:	TER			7. If Unit or CA Agr	eement, Name and No.
lb. Type of Well: ☐Oil Well ☐Other		Single Zone Multip	ole Zone	8. Lease Name and Twelvemile V	Well No. Vash 11-13-5-20
2. Name of Operator The Houston Exploration Company		•		9. API Well No.	,38437
3a. Address 1100 Louisiana, Suite 2000, Houston, TX 7700		ne No. (include area code) 3-830-6800		10. Field and Pool, or Exploratory	Exploratory
4. Location of Well (Report location clearly and in accordance with At surface 1,899' FSL & 1,984' FWL NE 1  At proposed prod. zone Same as above	•	•		,	Blk.and Survey or Area R20E. S.L.B.&M.
14. Distance in miles and direction from nearest town or post office* 9.3 miles south of Vernal, UT				12. County or Parish Uintah	13. State UT
15. Distance from proposed* 1,899' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No <b>2,00</b> 0	o. of acres in lease	17. Spacin	g Unit dedicated to this	well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  NA	19. Pro	oposed Depth 500'	20. BLM/ 10415	BIA Bond No. on tile	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,268' GR	22. Ap	proximate date work will sta 01/01/2007	rt*	23. Estimated duration 30 Days	on
The following, completed in accordance with the requirements of Ons		Attachments d Gas Order No.1, must be a	ttached to th	is form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	em Lands, tl	Item 20 above).  be 5. Operator certific	cation	•	n existing bond on file (see as may be required by the
25. Signature William a Tyan	1	Name (Printed/Typed) William A Ryan			Date 07/31/2006
Title Agent					
Approved by (Signature)	1.	Name (Printed Typed) TEXXY KEWCZK	(A		Date 3-28-2007
Title Assignat Field Manager Lands & Mineral Resources		Office VERNA	AL FIS		
Application approval does not warrant or certify that the applicant h	ioids legal o	r equitable title to those righ	its in the sub	bject lease which would	entitle the applicant to

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

Conditions of approval, if any, are attached.

conduct operations thereon.

# CONDITIONS OF APPROVAL ATTACHED

# NOTICE OF APPROVAL

RECEIVED
MAK 3 0 2007

DIV. OF OIL CAS & MINING

06BM2344A



## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL, UT 84078** 

(435) 781-4400



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

**NESW, Sec 13, T5S, R20E Company: Houston Exploration Company** Location: UTU-76494 Lease No:

Twelvemile Wash 11-13-5-20 Well No:

170 South 500 East

N/A **Agreement:** API No: 43-047-38437

Title Petroleum Engineer: Petroleum Engineer: Petroleum Engineer: Petroleum Engineer: Supervisory Petroleum Technician:	Name Matt Baker Michael Lee James Ashley Ryan Angus Jamie Sparger Paul Buhler	Office Phone Number 435-781-4490 435-781-4432 435-781-4470 435-781-4430 435-781-4502 435-781-4475	Cell Phone Number 435-828-4470 435-828-7875 435-828-7874 435-828-3913 435-828-4029
NRS/Enviro Scientist:	Karl Wright Holly Villa Melissa Hawk Chuck MacDonald Jannice Cutler	435-781-4484 435-781-4404 435-781-4476 435-781-4441 435-781-3400	435-828-7381
NRS/Enviro Scientist: NRS/Enviro Scientist: NRS/Enviro Scientist: NRS/Enviro Scientist: NRS/Enviro Scientist: NRS/Enviro Scientist: After Hours Contact Number: 435-7	Michael Cutler Anna Figueroa Verlyn Pindell Darren Williams Nathan Packer	435-781-3401 435-781-3407 435-781-3402 435-781-4447 435-781-3405 Fax: 435-781-4410	

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.

## **NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS/Enviro Scientist)	<ul> <li>Forty-Eight (48) hours prior to construction of location and access roads.</li> </ul>
Location Completion (Notify NRS/Enviro Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supervisory Petroleum Technician)	<ul> <li>Twenty-Four (24) hours prior to running casing and cementing all casing strings</li> </ul>
BOP & Related Equipment Tests (Notify Supervisory Petroleum Technician)	- Twenty-Four (24) hours prior to initiating pressure tests
First Production Notice (Notify Petroleum Engineer)	<ul> <li>Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days</li> </ul>

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### **General Surface COAs**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer AO. A report will be prepared by a BLM permitted paleontologist and submitted to the AO at the completion of surface disturbing activities.

## **Specific Surface COAs**

- Surface Conditions of Approval or monitoring are listed in the Surface Use Plan of the APDs.
- The Operator will bury all pipelines within the main drainage crossings. This mitigation measure will negate any potential impacts to T&E fish.
- The Operator will use a double layer of felt under the standard 16mm liner for the reserve pit to
  prevent an excessive amount of contamination or leakage in the liner. This mitigation shall
  negate any potential impact to T&E fish.
- The Operator will armor the fill on corner #10 with big rocks.
- The Operator will construct a catch basin at the head of the drainage upon entrance to the location and will reroute the existing drainage around the west side of the location.
- The Operator will keep all fill materials out of the 100-year floodplain of Twelvemile Wash that
  exists to the west of the location.
- The Operator will contact the authorized officer (AO) of the BLM 48-hours prior to moving any dirt. This will suffice as the 48 hour construction notice, and a BLM representative shall be present on construction of this location, and/or access road.
- The operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM weeds specialist or the appropriate County Extension Office. On BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.
- Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee will submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the Best Management Practice of the reshaping of the pad to the original contour to the extent possible; the re-spreading of the top soil up to the rig anchor points; and, reseeding the area using appropriate reclamation methods.
- The interim seed mix for reclamation would be:

Hy-crest Crested Wheat grass	Agropyron cristatum	6 lbs per acre
Western Wheat grass	Agropyron smithii	3 lbs per acre
Needle and Thread grass	Stipa comata	3 lbs per acre

Following well plugging and abandonment, the location, access roads, pipelines, and other
facilities shall be reclaimed. All disturbed surfaces shall be reshaped to approximate the
original contour; the top soil re-spread over the surface; and, the surface re-vegetated. The
surface of approved staging areas where construction activities did not occur may require
disking or ripping and reseeding.

#### DOWNHOLE CONDITIONS OF APPROVAL

#### SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- A casing shoe integrity test shall be run on the surface casing shoe.
- Production casing cement shall be brought up and into the intermediate casing.
- A cement Bond Log (CBL) shall be run from the production casing shoe to the intermediate casing shoe. A field copy of the CBL shall be submitted to the BLM Vernal Field Office.
- Intermediate casing cement shall be brought up and into the surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment BOPE shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
  daily drilling report. Components shall be operated and tested as required by Onshore Oil &
  Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
  performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
  reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
  is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
  Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources such as Gilsonite, tar sands, oil shale, trona, etc. to the Vernal Field Office, in writing, within 5 working days of

each encounter. Each report shall include the well name/number, well location, date and depth from KB or GL of encounter, vertical footage of the encounter and, the name of the person making the report along with a telephone number should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a
  weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is
  completed.
- A cement bond log CBL will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" Oil and Gas Operations Report OGOR starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 303 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide, as a
  minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - o Well name and number.
  - Well location ¼¼, Sec., Twn, Rng, and P.M..
  - Date well was placed in a producing status date of first production for which royalty will be paid.
  - The nature of the well's production, i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons.
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees NTL 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events fires, accidents, blowouts, spills, discharges as specified in NTL 3A will
  be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be
  reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major
  Events" will be reported in writing within 15 days. "Minor Events" will be reported on the
  Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" BLM Form 3160-4 shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data

obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples cuttings, fluid, and/or gas shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" Form BLM 3160-5 must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDEN	FOR 5. LEASE DESIGNATION AND SERIAL NUMBER	t
<b>~~</b>	5. LEASE DESIGNATION AND SERIAL NUMBER	:
	11711 70404	

FORM 9

	U1U-76494			
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME:			
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: Twelve Mile Wash 11-13-5-20			
2. NAME OF OPERATOR: The Houston Exploration Company	9. API NUMBER: 4304738437			
3. ADDRESS OF OPERATOR: 1100 Louisiana, Suite 2000 CITY Houston STATE TX ZIP 77002 PHONE NUMBER: (713) 830-6800	10. FIELD AND POOL, OR WLDCAT: Exploratory			
1100 Louisiana, Suite 2000 CITY Houston STATE TX ZIP 77002 (713) 830-6800	Exploratory			
FOOTAGES AT SURFACE: 1899' FSL & 1984' FWL	COUNTY: Uintah			
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 13 T5S 20E	STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION TYPE OF ACTION				
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  CASING REPAIR  DEEPEN FRACTURE TREAT  NEW CONSTRUCTION	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON			
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE  CHANGE TUBING PLUG AND ABANDON	TUBING REPAIR  VENT OR FLARE			
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	WATER DISPOSAL			
(Submit Original Form Only)  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF			
Date of work completion:  COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	✓ other: Extension			
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION				
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes  Operator respectfully requests to extend approval for the subject location for one year.	s, etc.			
Approved by the Utah Division of Oil, Gas and Mining				
Date: 07-26-07	**9			
NAME (PLEASE PRINT)  SIGNATURE  William A. Ryan  DATE  TITLE  Agent  7/19/2007				

helluste.

# Application for Permit to Drill Request for Permit Extension

Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 4304738437  Well Name: Twelve Mile Wash 11-13-5-20  Location: Section 13, Township 5 South, Range 20 East NESW  Company Permit Issued to: The Houston Exploration Company
Date Original Permit Issued: 8/14/2006
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.
Following is a checklist of some items related to the application, which should be verified.
If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes□No☑
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☑
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□No☑
Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes□No ☑
Has the approved source of water for drilling changed? Yes□No☑
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No☑
Is bonding still in place, which covers this proposed well? Yes ☑No□
William a Tyan 7/19/2007
Signature Date
Title: Agent
Representing: The Houston Exploration Company

## Division of Oil, Gas and Mining

## OPERATOR CHANGE WORKSHEET

ROUTING	
1. DJJ	
2. CDW	

Change of Operator (Well Sold)	X - Operator Merger							
The operator of the well(s) listed below has chan	ged,	effecti	ve:			6/1/2007		
FROM: (Old Operator): N2525 - The Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002	TO: (New Operator): N6965-Forest Oil Corporation 707 17th St, Suite 3600 Denver, CO 80202							
Phone: 1-(713) 830-6800				Phone: 1 (303)	812-1755			
CA No.		· · · · · · · · · · · · · · · · · · ·		Unit:				
WELL NAME	SEC	TWN	N RNG	API NO	ENTITY	LEASE	WELL	WELL
					NO	TYPE	TYPE	STATUS
SEE ATTACHED LIST								
OPERATOR CHANGES DOCUMENT: Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation wa 2. (R649-8-10) Sundry or legal documentation wa	s rec	eived f				7/30/2007	_	
				-		7/30/2007		7/21/2007
<ul><li>3. The new company was checked on the <b>Departu</b></li><li>4a. Is the new operator registered in the State of U</li></ul>		01 <b>C</b> 01	mmerce	Business Numb				7/31/2007
4b. If <b>NO</b> , the operator was contacted contacted o				Business Numi	ber:	571171-0143	-	
5a. (R649-9-2)Waste Management Plan has been re		d on:		IN PLACE				
5b. Inspections of LA PA state/fee well sites compl				INTLACE	**			
5c. Reports current for Production/Disposition & S				YES	-			
6. Federal and Indian Lease Wells: The BL			o DIA L		<u>.</u>	1		-
or operator change for all wells listed on Federa						_	DIA	, ,
7. Federal and Indian Units:	ii or i	naian	reases o	n:	BLM	. 7/31/2007	BIA	
The BLM or BIA has approved the successor	ofur	it one	rator for	razalla liatad an		## / m		
8. Federal and Indian Communization Ag					•	n/a	-	
The BLM or BIA has approved the operator f						n/a		
9. Underground Injection Control ("UIC"				vision has appro	oved UIC F		- fer of Au	thority to
Inject, for the enhanced/secondary recovery un	,	iect fo					n/a	v
DATA ENTRY:	•	,		•	, , , , , , ,			-
1. Changes entered in the Oil and Gas Database	on:			8/27/2007				
2. Changes have been entered on the Monthly Op	erate	or Cha	inge Sp	read Sheet on:	-	8/27/2007	_	
3. Bond information entered in RBDMS on:				8/27/2007	•			
<ul><li>4. Fee/State wells attached to bond in RBDMS on</li><li>5. Injection Projects to new operator in RBDMS of</li></ul>				8/27/2007				
<ul><li>5. Injection Projects to new operator in RBDMS of</li><li>6. Receipt of Acceptance of Drilling Procedures for</li></ul>		D/Nev	v on.	n/a	7/30/2007			
BOND VERIFICATION:	лд	DITION	W OII.		1/30/2001			
Federal well(s) covered by Bond Number:				6236351				
2. Indian well(s) covered by Bond Number:			•	n/a	•			
3a. (R649-3-1) The <b>NEW</b> operator of any fee well	l(s) li	sted co	overed b	y Bond Numbe	- r	6218963		
3b. The <b>FORMER</b> operator has requested a release	of li	ability	from th	eir bond on:	not yet	1	•	
LEASE INTEREST OWNER NOTIFIC	ATI	ON:						
4. (R649-2-10) The <b>FORMER</b> operator of the fee			en conta	acted and inform	ned by a let	ter from the D	ivision	
of their responsibility to notify all interest owner					8/1/2007			
COMMENTS								

# STATE OF UTAH

	DIVISION OF OIL, GAS AND M		5. LEASE DESIGNATION AND SERIAL NUMBER:  See Attached List
SUNDRY	NOTICES AND REPORT	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill us	www.wolle_cignificantly_doopen ovicting walls below a	urrent bottom-hole depth, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME:
drill horizontal lat	terals. Use APPLICATION FOR PERMIT TO DRILL	form for such proposals.	WELL NAME and NUMBER;
OIL WELL	GAS WELL OTHER		See Attached List
2. NAME OF OPERATOR: Forest Oil Corporation	N6965		9. API NUMBER: Various
3. ADDRESS OF OPERATOR:		PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
707 17th Street, #3600  4. LOCATION OF WELL	Denver, STATE CO ZI	<sub>P</sub> 80202 (303) 812-1755	
FOOTAGES AT SURFACE: See att	ached list		COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN:		STATE:
	in in the tenth of the large of	Control of the	UTAH
	OPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION	ACIDIZE	TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	DEEPEN FRACTURE TREAT	REPERFORATE CURRENT FORMATION  SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
✓ SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS  COMMINGLE PRODUCING FORMATIONS	PRODUCTION (START/RESUME)  RECLAMATION OF WELL SITE	
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all	pertinent details including dates, depths, volu	mes, etc. N2525
N-2525) to Forest Oil Corp	oration (N-6965). Forest merge	ched list of Utah wells from The ed with The Houston Exploration ontinue to be contract operated b	Houston Exploration Company Company, a copy of the merger
	new operator, accepts all applicucted on the lease or portion of	able terms, conditions, stipulation the lease described.	ns and restrictions concerning
Forest Oil Corporation mee	ets the State of Utah bonding re	equirements under Safeco bond #	#6218963.
Please send all future corr	espondence to Forest Oil Corpo	oration at the above listed addres	SS.
Forest Oil Corporation, 707	7 17th Street, Suite #3600, Den	ver, CO 80202	
00/ 1		7 -	-5-47
J. C. Ridens, Senior Vice F	President - Western Region		7 - 6 - 7 Date
		· · · · · · · · · · · · · · · · · · ·	
NAME (PLEASE PRINT) Joanne C.	Hresko	TITLE Vice President	& General Mgr Northern Division
SIGNATURE AGAMA	C. Theshan	DATE 7-5.07	7
		DAIL	
(This space for State use only)	0	Ill wells with status	APD or New
APPROVED_	<u>8 1271 07</u>	status	RECEIVED
(5/2000) Carlene A	ussell (See Ins	structions on Reverse Side)	
Division of Oil, Gas a	and Mining	,	JUL 3 0 2007
Earlene Russell, Engir	neering Technician		DIN UE OIL CAS & MAINING

wmp DIN UE UIT CVC & MINING

well name	sec	twp	rng	api	entity	lease	well	stat	flag
HORSESHOE BEND 16-33	33			4304736214	Caroney	Federal	OW	APD	1
HORSESHOE BEND 3-33	33			4304736215		Federal	OW	APD	
N HORSESHOE 7-16-6-21	16			4304737438		State	GW	APD	С
N HORSESHOE 9-16-6-21	16			4304737439	<u> </u>	State	GW	APD	C
N HORSESHOE 15-16-6-21	16			4304737440		State	GW	APD	C
N HORSESHOE 11-16-6-21	16			4304737441		State	GW	APD	C
N HORSESHOE 1-16-6-21	16		<u> </u>	4304737442	-	State	GW	APD	$\frac{c}{c}$
N HORSESHOE 13-2-6-21	02			4304737476		State	GW	APD	$\frac{c}{c}$
N HORSESHOE 15-2-6-21	02			4304737477	ļ	State	GW	APD	$\frac{c}{C}$
GUSHER 2-2-6-19	02			4304737561		State	ow	APD	C
GUSHER 16-2-6-19	02			4304737562		State	ow	APD	C
GUSHER 1-2-6-19	02			4304737563		State	OW	APD	C
GUSHER 3-2-6-19	02			4304737568		State	OW	APD	C
E COYOTE 6-2-8-25	02			4304737572		State	GW	APD	C
E COYOTE 3-2-8-25	02			4304737573		State	GW	APD	C
E COYOTE 8-2-8-25	02			4304737574		State	GW	APD	C
N HORSESHOE 13-16-6-21	16			4304737575		State	GW	APD	C
E COYOTE 4-2-8-25	02	<del></del>		4304737882		State	GW	APD	C
E COYOTE 14-2-8-25	02	<del></del>		4304737883		State	GW	APD	C
E COYOTE 10-2-8-25	02			4304737884		State	GW	APD	C
E COYOTE 16-2-8-25	02			4304737885		State	GW	APD	C
E COYOTE 12-2-8-25	02			4304737886		State	GW	APD	C
N HORSESHOE 16-18-6-22	18			4304737887		Federal	GW	APD	C
N HORSESHOE 14-18-6-22	18			4304737888		Federal	GW	APD	C
N HORSESHOE 2-18-6-22	18			4304737889		Federal	GW	APD	C
N HORSESHOE 10-18-6-22	18			4304737890		Federal	GW	APD	C
N HORSESHOE 8-18-6-22	18			4304737891		Federal	GW	APD	C
N HORSESHOE 13-15-6-21	15			4304738013		Federal	GW	APD	C
N HORSESHOE 15-15-6-21	15			4304738014		Federal	GW	APD	C
N HORSESHOE 11-15-6-21	15			4304738015		Federal	GW	APD	C
N HORSESHOE 9-15-6-21	15			4304738016		Federal		APD	C
N HORSESHOE 5-15-6-21				4304738017		Federal			C
N HORSESHOE 3-15-6-21				4304738018		Federal		-	С
N HORSESHOE 5-20-6-22				4304738019		Federal			С
N HORSESHOE 13-20-6-22	20	060S	220E	4304738020		Federal	GW	APD	С
N HORSESHOE 3-20-6-22	20	060S	220E	4304738021		Federal	GW	APD	С
N HORSESHOE 7-20-6-22	20	060S	220E	4304738022		Federal	GW	APD	С
N HORSESHOE 11-20-6-22	20	060S	220E	4304738023		Federal	GW	APD	С
N HORSESHOE 2-12-6-21	12	060S	210E	4304738198		Federal	GW	APD	С
N HORSESHOE 14-12-6-21	12	060S	210E	4304738199		Federal	GW	APD	С
N HORSESHOE 10-12-6-21	12	060S	210E	4304738200		Federal	GW	APD	С
N HORSESHOE 8-12-6-21	12	060S	210E	4304738201		Federal	GW	APD	С
N HORSESHOE 16-13-6-21	13	060S	210E	4304738202		Federal	GW	APD	С
N HORSESHOE 15-17-6-22	17	060S	220E	4304738203		Federal	GW	APD	С
N HORSESHOE 5-19-6-22	19	060S	220E	4304738204		Federal	GW	APD	C
N HORSESHOE 15-19-6-22	19	060S	220E	4304738205		Federal	GW	APD	С
N HORSESHOE 3-21-6-22	21	060S	220E	4304738206		Federal	GW	APD	С
N HORSESHOE 11-21-6-22	21	060S	220E	4304738207			GW	APD	С
N HORSESHOE 15-21-6-22	21	060S	220E	4304738208		Federal	GW	APD	C
N HORSESHOE 13-21-6-22	21	060S	220E	4304738209			GW	APD	С
N HORSESHOE 5-21-6-22	21	060S	220E	4304738210		Federal	GW	APD	С
N HORSESHOE 7-19-6-22	19	060S	220E	4304738271		Federal	GW	APD	C
N HORSESHOE 5-16-6-22	16	060S	220E	4304738406		State	GW	APD	

recall manua	1	14	T	T. •	1.,	1	11		Ta
well_name	sec	twp	rng	api	entity	lease	well	stat	flag
TWELVEMILE WASH 11-13-5-20	13			4304738437	ļ	Federal	GW	APD	C
TWELVEMILE WASH 1-15-5-20	15			4304738438	ļ	Federal	GW	APD	C
N HORSESHOE 4-33-5-21	33	_		4304738439	ļ	Federal	GW	APD	С
GUSHER 6-15-6-19	15	060S	-	4304738440	<u> </u>	Federal	GW	APD	С
HORSESHOE BEND W 9-34-6-20	34			4304738441	<u> </u>	Federal	GW	APD	С
N HORSESHOE 16-12-6-21	12			4304738442		Federal	GW	APD	С
N WALKER HOLLOW 12-29-6-23	29			4304738443		Federal	GW	APD	С
N WALKER HOLLOW 10-30-6-23	30	060S		4304738444		Federal	GW	APD	С
PELICAN LAKE 11-3-8-20	03			4304738445		Federal	GW	APD	C
PELICAN LAKE 8-4-8-20	04			4304738446		Federal	GW	APD	С
E COYOTE 10-3-8-25	03		250E	4304738447		Federal	GW	APD	С
BORDER 10-9-8-25	09	080S	250E	4304738448		Federal	GW	APD	C
N WALKER HOLLOW 14-33-6-23	33			4304738455		Federal	GW	APD	С
SNAKE JOHN WASH 14-11-7-25	11	070S	250E	4304738456		Federal	GW	APD	С
SNAKE JOHN WASH 4-24-7-25	24	070S	250E	4304738457		Federal	GW	APD	C
SQUAW RIDGE 1-26-7-25	26	070S	250E	4304738458		Federal	GW	APD	С
SQUAW RIDGE 13-28-7-25	28	070S	250E	4304738459		Federal	GW	APD	С
SQUAW RIDGE 16-30-7-25	30	070S	250E	4304738460		Federal	GW	APD	С
SQUAW RIDGE 14-16-7-25	16	070S	250E	4304738461		State	GW	APD	С
GUSHER 13-11-5-19	11	050S	190E	4304738462		State	GW	APD	С
N HORSESHOE 1-15-6-21	15	060S	210E	4304738831		Federal	GW	APD	С
N HORSESHOE 16-9-6-22	09	060S	220E	4304739083		State	GW	APD	
N HORSESHOE 12-7-6-22	07	060S	220E	4304739084		State	GW	APD	
N HORSESHOE 14-10-6-22	10	060S	220E	4304739085		State	GW	APD	
N HORSESHOE 2-15-6-22	15	060S	220E	4304739086		State	GW	APD	
N WALKER HOLLOW 12-32-6-23	32			4304739087		State	GW	APD	
N WALKER HOLLOW 10-32-6-23	32	060S	230E	4304739088		State	GW	APD	
N WALKER HOLLOW 16-32-6-23	32			4304739089		State	GW	APD	
N WALKER HOLLOW 8-32-6-23	32	060S	230E	4304739090		State	GW	APD	
N WALKER HOLLOW 11-36-6-23	36			4304739091		State	GW	APD	
N WALKER HOLLOW 13-36-6-23	36			4304739092		State		APD	
N WALKER HOLLOW 14-32-6-23				4304739093				APD	
N WALKER HOLLOW 15-36-6-23	36			4304739094		State		APD	<u> </u>
N HORSESHOE 4-15-6-22	15			4304739095	_	State		APD	
N HORSESHOE 9-10-6-21	10			4304739284		Federal			С
N HORSESHOE 12-13-6-21	13			4304739285		Federal			Ĕ
N HORSESHOE 7-15-6-21	15			4304739286				APD	
N HORSESHOE 9-19-6-22	19			4304739287		Federal			
N HORSESHOE 13-19-6-22	19			4304739288				APD	
N HORSESHOE 11-19-6-22	19			4304739289		Federal			$\vdash$
SOUAW RIDGE 16-13-7-24	13			4304739319				APD	$\overline{C}$
N HORSESHOE 16-7-6-22	07			4304739320	-				C
SQUAW RIDGE 8-16-7-25	16	_		4304739320		State			C
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	110	0700	نتعدم	TJUT/JUU24	Ll	Diale	U 77	T 477 44	$\sim$

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

### Request to Transfer Application or Permit to Drill

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

Well name:	Twelvemile Wash 11-13-5-20						
API number:	4304738437						
Location:	Qtr-Qtr: NESW Section: 13 Township: 5S Range: 20E						
Company that filed original application:	The Houston Exploration Company						
Date original permit was issued:	08/14/2006						
Company that permit was issued to:	The Houston Exploration Company						

Check one	Desired Action:
	Transfer pending (unapproved) Application for Permit to Drill to new operator
	Transfer pending (unapproved) Application for Fermit to Dim to new operator
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
✓	Transfer approved Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.		
If located on private land, has the ownership changed?		1
If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		✓
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		<b>✓</b>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		<b>✓</b>
Has the approved source of water for drilling changed?		<b>√</b>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		✓
Is bonding still in place, which covers this proposed well? Bond No. 6218963	✓	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Tami Hofmann	Title Regulatory Specialist	
Signature Jami Homana	Date 08/06/2007	
Representing (company name) Forest Oil Corporation		

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.



# United States Department of the Interior

**BUREAU OF LAND MANAGEMENT** 

http://www.blm.gov/utah/vernal

Vernal Field Office 170 South 500 East Vernal, UT 84078 (435) 781-4400 Fax: (435) 781-4410



IN REPLY REFER TO: 3160 UT08300

September 7, 2007

Lloyd Bruce The Houston Exploration Co. 1100 Louisiana, Suite 2000 Houston, Texas 77002-6800

Re: Well No. Twelvemile Wash 11-13-5-20

NESW, Sec. 13, T5S, R20E

Uintah County, Utah Lease No. U-76494

Dear Mr. Bruce:

The Application for Permit to Drill the above-referenced well, Twelvemile Wash 11-13-5-20 was approved on March 28, 2007. According to our records, Federal Lease UTU-76494 has expired by its own terms and conditions, effective June 30, 2007. In view of the foregoing, this office is rescinding its approval of the referenced Application for Permit to Drill due to the lease expiration.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

If you have any questions in this matter, please contact me at phone number (435) 781-4440.

Sincerely,

erry Kenczka

Assistant Field Manager
Lands & Minerals Resources

cc: UDOGM

RECEIVED SEP 17 2007

DIV OF OIL, GAS & MINING



GARY R. HERBERT
Lieutenant Governor

# Star of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

**Division of Oil Gas and Mining** 

JOHN R. BAZA Division Director

September 19, 2007

Lloyd Bruce The Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002-6800

Re: APD Rescinded - Twelvemile Wash 11-13-5-20 Sec. 13, T. 5S, R. 20E,

Uintah County, Utah API No. 43-047-38437

Dear Mr. Bruce:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 14, 2006. On July 26, 2007, the Division granted a one-year APD extension. On September 17, 2007 the Division received a letter from the Bureau of Land Management (BLM), which states that the permit filed with the BLM is being returned. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective September 19, 2007.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

9) lasuc

cc: Well File

Bureau of Land Management, Vernal

